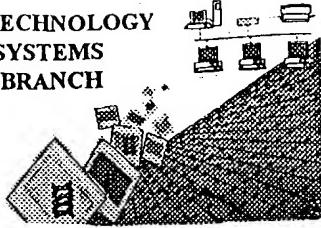


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/1910,354  
Source: I E W 16  
Date Processed by STIC: 5/28/09

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

**Raw Sequence Listing Error Summary**

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>09/910,354</u>
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**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- 1 Wrapped Nucleic Acid Residues The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Acid Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 This sequence is intentionally skipped  
  
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
 <210> sequence id number  
 <400> sequence id number  
 000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFW16

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004  
TIME: 13:27:24

Input Set : A:\PTO.YF.txt  
Output Set: N:\CRF4\05282004\I910354.raw

3 <110> APPLICANT: Jarrell, et al., Kevin  
 5 <120> TITLE OF INVENTION: Modular Vector Systems  
 7 <130> FILE REFERENCE: 2003320-0032  
 9 <140> CURRENT APPLICATION NUMBER: 09/910,354  
 10 <141> CURRENT FILING DATE: 2001-07-20  
 12 <160> NUMBER OF SEQ ID NOS: 24  
 14 <170> SOFTWARE: PatentIn version 3.2  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 23  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: PCR primer EU-1 for amplification of a vector fragment containing  
 W--> 20 bacterial origin of replication, Lac I gene, and pT7 promoter.  
 22 <400> SEQUENCE: 1  
 23 cauggtatat ctccttctta aag ↑ mandatory, <213> response 23  
 26 <210> SEQ ID NO: 2  
 27 <211> LENGTH: 22  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: PCR primer Eu-2 for amplification of a vector fragment containing  
 W--> 30 bacterial origin of replication, Lac I gene, and pT7 promoter.  
 32 <400> SEQUENCE: 2  
 33 cucatgacca aaatccctta ac ↑ SAME ERROR 22  
 36 <210> SEQ ID NO: 3  
 37 <211> LENGTH: 22  
 38 <212> TYPE: DNA  
 39 <213> ORGANISM: PCR primer EU-3 for amplification of a vector fragment containing Amp  
 W--> 40 gene. ↑ SAME ERROR 22  
 42 <400> SEQUENCE: 3  
 43 gagattatca aaaaggatct tc ↑ SAME ERROR 22  
 46 <210> SEQ ID NO: 4  
 47 <211> LENGTH: 20  
 48 <212> TYPE: DNA  
 49 <213> ORGANISM: PCR primer EU-4 for amplification of a vector fragment containing Amp  
 W--> 50 gene. ↑ SAME ERROR 20  
 52 <400> SEQUENCE: 4  
 53 uaactagcat aacccttg 5' Lac Z for amplification of an insert fragment containing  
 56 <210> SEQ ID NO: 5  
 57 <211> LENGTH: 21  
 58 <212> TYPE: DNA  
 59 <213> ORGANISM: PCR primer 5' Lac Z for amplification of an insert fragment containing  
 W--> 60 Lac Z gene. ↑ SAME ERROR 21  
 62 <400> SEQUENCE: 5  
 63 augaccatga ttacgccaac g  
 66 <210> SEQ ID NO: 6

*PIS See item #10 On  
ERROR Sheet.  
PLS move this  
response to line 123  
Does Not Comply  
Corrected Diskette Needed  
(Pg. 1-4) ↗*

*INVALID  
<213>  
Response*

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004  
TIME: 13:27:24

Input Set : A:\PTO.YF.txt  
Output Set: N:\CRF4\05282004\I910354.raw

✓ SAME  
ERRORS

67 <211> LENGTH: 22  
 68 <212> TYPE: DNA  
 69 <213> ORGANISM: PCR primer 3' Lac Z for amplification of an insert fragment containing  
 --> 70 Lac Z gene.  
 72 <400> SEQUENCE: 6  
 73 uuacaatttc cattcgccat tc 22  
 76 <210> SEQ ID NO: 7  
 77 <211> LENGTH: 37  
 78 <212> TYPE: DNA  
 79 <213> ORGANISM: PCR primer 5' OST for amplifying an Ori fragment from pET 19 b.  
 81 <400> SEQUENCE: 7  
 82 ctgctaaggc agcucgcacag atcgctgaga taggtgc 37  
 85 <210> SEQ ID NO: 8  
 86 <211> LENGTH: 36  
 87 <212> TYPE: DNA  
 88 <213> ORGANISM: PCR primer 1N 3' Ori(s) for amplifying an Ori fragment from pET 19b.  
 90 <400> SEQUENCE: 8  
 91 aagcttgcta agtagggcgt ttttccatag gctccg 36  
 94 <210> SEQ ID NO: 9  
 95 <211> LENGTH: 36  
 96 <212> TYPE: DNA  
 97 <213> ORGANISM: PCR primer 1NT5'KAN for amplifying a fragment containing the kanamycin  
 --> 98 resistance gene from pCR2.1 topo.  
 100 <400> SEQUENCE: 9  
 101 ctaccttagca agctuctatc tggacaaggg aaaacg 36  
 104 <210> SEQ ID NO: 10  
 105 <211> LENGTH: 41  
 106 <212> TYPE: DNA  
 107 <213> ORGANISM: PCR primer T73' KAN for amplifying a fragment containing the  
kanamycin  
 --> 108 resistance gene from pCR2.1 topo.  
 110 <400> SEQUENCE: 10  
 111 ccctataatgt agtcgttatta aggccaaaaac tctcaaggat c 41  
 114 <210> SEQ ID NO: 11  
 115 <211> LENGTH: 42  
 116 <212> TYPE: DNA  
 117 <213> ORGANISM: PCR primer tcs1 for amplifying a fragment containing the luciferase  
gene  
 --> 118 from pG1 II basic.  
 120 <400> SEQUENCE: 11  
 121 ttaatacgac tcactatagg gatggaagac gccaaaaaca ta 42  
 124 <210> SEQ ID NO: 12  
 125 <211> LENGTH: 36  
 126 <212> TYPE: DNA  
 127 <213> ORGANISM: PCR primer tc58 for amplifying a fragment containing the luciferase  
gene  
 --> 128 from pG1 II basic.  
 130 <400> SEQUENCE: 12  
 131 gagctcaattt acatgttaca atttggactt tccgcc 36  
 134 <210> SEQ ID NO: 13  
 135 <211> LENGTH: 36  
 136 <212> TYPE: DNA

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004  
TIME: 13:27:24

Input Set : A:\PTO.YF.txt  
Output Set: N:\CRF4\05282004\I910354.raw

*SAME  
ERRORS*

137 <213> ORGANISM: PCR primer 1NT 5'KAN for amplifying a fragment containing the anamycin

--> 138 resistance gene from pCR 2.1 topo.

140 <400> SEQUENCE: 13

141 ctacctagca agctuctatc tggacaaggaaaaaacg 36

144 <210> SEQ ID NO: 14

145 <211> LENGTH: 33

146 <212> TYPE: DNA

147 <213> ORGANISM: PCR primer 1NT 3'KAN for amplifying a fragment containing the anamycin

--> 148 resistance gene from pCR 2.1 topo.

150 <400> SEQUENCE: 14

151 gagctcaattt agcaaggcgaaaaactctcaaagg 33

154 <210> SEQ ID NO: 15

155 <211> LENGTH: 37

156 <212> TYPE: DNA

157 <213> ORGANISM: PCR primer 1NT5' Ori for amplifying a fragment containing the Ori

rom

--> 158 pET 19b.

160 <400> SEQUENCE: 15

161 ttgctaagttagcucgacatcgctgaga taggtgc 37

164 <210> SEQ ID NO: 16

165 <211> LENGTH: 36

166 <212> TYPE: DNA

167 <213> ORGANISM: PCR primer 1N3'Ori(s) for amplifying a fragment containing the Ori

rom

--> 168 pET 19b

170 <400> SEQUENCE: 16

171 aagcttgcttaatggcgatccatag gctccg 36

174 <210> SEQ ID NO: 17

175 <211> LENGTH: 37

176 <212> TYPE: DNA

177 <213> ORGANISM: PCR primer 3nt 5'OST for amplifying an Ori fragment.

179 <400> SEQUENCE: 17

180 ctgctaagttagcucgacatcgctgaga taggtgc 37

183 <210> SEQ ID NO: 18

184 <211> LENGTH: 36

185 <212> TYPE: DNA

186 <213> ORGANISM: PCR primer 3nt 5'OST for amplifying an Ori fragment.

188 <400> SEQUENCE: 18

189 aagcttgcttaatggcgatccatag gctccg 36

192 <210> SEQ ID NO: 19

193 <211> LENGTH: 36

194 <212> TYPE: DNA

195 <213> ORGANISM: PCR primer 3nt 5'KHT for amplifying a KAN fragment

197 <400> SEQUENCE: 19

198 ctacctagca agctuctatc tggacaaggaaaaaacg 36

201 <210> SEQ ID NO: 20

202 <211> LENGTH: 35

203 <212> TYPE: DNA

204 <213> ORGANISM: PCR primer 3nt 3'KST for amplifying an Ori(s) fragment.

206 <400> SEQUENCE: 20

207 gagctcaattt agcaggcgaaaaactctcaaagg 35

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004  
TIME: 13:27:24

Input Set : A:\PTO.YF.txt  
Output Set: N:\CRF4\05282004\I910354.raw

✓ SAME  
ERRORS

210 <210> SEQ ID NO: 21  
211 <211> LENGTH: 37  
212 <212> TYPE: DNA  
213 <213> ORGANISM: PCR primer 1NT 5'ORI for amplifying an Ori(s) fragment.  
215 <400> SEQUENCE: 21  
216 ttgcttaatg agctcgacag atcgctgaga taggtgc 37  
219 <210> SEQ ID NO: 22  
220 <211> LENGTH: 36  
221 <212> TYPE: DNA  
222 <213> ORGANISM: PCR primer 1NT3' Ori(s) for amplifying an Ori(s) fragment.  
224 <400> SEQUENCE: 22  
225 aagcttgcta ggttagggcgt ttttccatag gctccg 36  
228 <210> SEQ ID NO: 23  
229 <211> LENGTH: 36  
230 <212> TYPE: DNA  
231 <213> ORGANISM: PCR primer 1NT 5'KAN for amplifying an KAN fragment.  
233 <400> SEQUENCE: 23  
234 ctaccttagca agcttuctatc tggacaaggaa 36  
237 <210> SEQ ID NO: 24  
238 <211> LENGTH: 33  
239 <212> TYPE: DNA  
240 <213> ORGANISM: PCR primer 1NT3'KAN for amplifying an Ori(s).  
242 <400> SEQUENCE: 24  
243 gagctcaattt agcaaggcga aaactctcaa gga 33

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004  
TIME: 13:27:25

Input Set : A:\PTO.YF.txt  
Output Set: N:\CRF4\05282004\I910354.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:11; Line(s) 117

Seq#:12; Line(s) 127

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004

TIME: 13:27:25

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\05282004\I910354.raw

L:20 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:30 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:40 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:50 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:60 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:70 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:98 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:108 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:118 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:128 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:138 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:148 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:158 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:  
L:168 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: